

ABSTRACT OF THE DISCLOSURE

A control circuit of a DC-DC converter including a  
switch circuit, which outputs a step-down control signal or  
5 a step-up control signal in response to a switching signal,  
and a switching signal generation circuit, which is  
connected to the switch circuit to generate the switching  
signal using a duty setting signal. The switching signal  
generation circuit decreases the number of external  
10 terminals in a semiconductor device having the control  
circuit.